What is claimed is:

1. A method for forming decorative panel products comprising:

preparing a substrate;

applying a decorative image and alignment marks corresponding to an image data file to a surface of the substrate to form a printed substrate;

detecting the alignment marks;

aligning the printed substrate with a cutting device using the detected alignment marks; and

driving the cutting device using the image data file to produce a panel preform.

2. A method for forming decorative panel products according to claim 1, further comprising:

modifying edge surfaces of the panel preform to form a finished panel product.

3. A method for forming decorative panel products according to claim 1, further comprising:

applying a premanufactured cover layer to at least a portion of a major surface of the substrate; and

printing the decorative image and alignment marks corresponding to the image data file on the premanufactured cover layer to form the printed substrate.

4. A method for forming decorative panel products according to claim 1, further comprising:

applying a primer layer to at least a portion of a major surface of the substrate; and

printing the decorative image and alignment marks corresponding to the image data file on the primer layer to form the printed substrate.

5. A method for forming decorative panel products according to claim 1, further comprising:

applying the decorative image and alignment marks corresponding to the image data file on a cover layer to form a printed cover layer; and

applying the printed cover layer to the surface of the substrate to form the printed substrate.

6. A method for forming decorative panel products according to claim 5, further comprising:

applying a reversed decorative image and reversed alignment marks corresponding to the image data file to a transfer base to form an image layer on the transfer base;

bringing the image layer into contact with a cover layer;

transferring the majority of the image layer from the transfer to the cover layer to form the decorative image and alignment marks on the printed cover layer; and

applying the printed cover layer to the surface of the substrate to form the printed substrate.

7. A method for forming decorative panel products according to claim 1, wherein:

aligning the printed substrate with a cutting device using the detected alignment marks includes

comparing an observed positioning of the detected alignment marks with an expected positioning of the detected alignment marks corresponding to the image data file;

adjusting the position of the printed substrate relative to the cutting device; and

repeating the comparing and adjusting steps until the observed positioning of the detected alignment marks is in sufficient correspondence with the expected positioning of the detected alignment marks.

8. A method for forming decorative panel products according to claim 1, further comprising:

forming a protective layer on the decorative image.

9. A method for forming decorative panel products comprising:

preparing a substrate;

printing a decorative image and alignment marks corresponding to an image data file on a surface of the substrate to form a printed substrate;

detecting the alignment marks;

generating a transformed image data file using the detected alignment marks; and

driving the cutting device using the transformed image data file to produce a panel preform.

10. A method for forming decorative panel products according to claim 9, further comprising:

modifying edge surfaces of the panel preform to form a finished panel product.

11. A method for forming decorative panel products according to claim 9, further comprising:

applying a premanufactured cover layer to at least a portion of a major surface of the substrate; and

printing the decorative image and alignment marks corresponding to the image data file on the premanufactured cover layer to form the printed substrate.

12. A method for forming decorative panel products according to claim 9, further comprising:

applying a primer layer to at least a portion of a major surface of the substrate; and

printing the decorative image and alignment marks corresponding to the image data file on the primer layer to form the printed substrate.

13. A method for forming decorative panel products according to claim 9, further comprising:

applying the decorative image and alignment marks corresponding to the image data file on a cover layer to form a printed cover layer; and

applying the printed cover layer to the surface of the substrate to form the printed substrate.

14. A method for forming decorative panel products according to claim 13, further comprising:

applying a reversed decorative image and reversed alignment marks corresponding to the image data file to a transfer base to form an image layer on the transfer base;

bringing the image layer into contact with a cover layer;

transferring the majority of the image layer from the transfer to the cover layer to form the decorative image and alignment marks on the printed cover layer; and

applying the printed cover layer to the surface of the substrate to form the printed substrate.

15. A method for forming decorative panel products according to claim 9, wherein:

aligning the printed substrate with a cutting device using the detected alignment marks includes

comparing an observed positioning of the detected alignment marks with an expected positioning of the detected alignment marks corresponding to the image data file;

preparing the transformed image data file adjusting the expected positioning of the detected alignment marks relative to the printed substrate;

comparing the observed positioning of the detected alignment marks with an updated expected positioning of the detected alignment marks corresponding to the transformed image data file;

repeating the preparing and comparing steps until the observed positioning of the detected alignment marks is in sufficient correspondence with the expected positioning of the detected alignment marks.

16. A method for forming decorative panel products according to claim 9, further comprising:

forming a protective layer on the decorative image.

17. An apparatus for manufacturing decorative panel products comprising:

means for applying a decorative image and alignment marks corresponding to an image data file to a surface of the substrate to form a printed substrate;

means for detecting the alignment marks on the printed substrate;

means for aligning the printed substrate with a cutting device using the detected alignment marks; and

means for driving the cutting device using the image data file to produce a panel preform from the printed substrate.

18. An apparatus for forming decorative panel products according to claim 17, further comprising:

means for applying a reversed decorative image and reversed alignment marks corresponding to the image data file to a transfer base to form an image layer on a transfer base;

means for bringing the image layer into contact with a cover layer;

means for transferring the majority of the image layer from the transfer to the cover layer to form the decorative image and alignment marks on the printed cover layer; and

means for applying the printed cover layer to the surface of the substrate to form the printed substrate.

19. An apparatus for forming decorative panel products according to claim 18, wherein:

the means for transferring the image layer from the transfer base to the cover layer applies a force tending to urge the image layer against the cover layer while heating the image layer.

20. An apparatus for manufacturing decorative panel products comprising:

means for applying a decorative image and alignment marks corresponding to an image data file to a surface of the substrate to form a printed substrate;

means for detecting the alignment marks on the printed substrate;

means for generating a transformed image data file using the detected alignment marks; and

means for driving the cutting device using the transformed image data file to produce a panel preform from the printed substrate.

21. An apparatus for forming decorative panel products according to claim 20, further comprising:

means for applying a reversed decorative image and reversed alignment marks corresponding to the image data file to a transfer base to form an image layer on a transfer base;

means for bringing the image layer into contact with a cover layer;

means for transferring the majority of the image layer from the transfer to the cover layer to form the decorative image and alignment marks on the printed cover layer; and

means for applying the printed cover layer to the surface of the substrate to form the printed substrate.

22. An apparatus for forming decorative panel products according to claim 21, wherein:

the means for transferring the image layer from the transfer base to the cover layer applies a force tending to urge the image layer against the cover layer while heating the image layer.

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